

# Office Action Summary

Application No.

09/704,667

Applicant(s)

SATO ET AL.

Examiner

Negussie Worku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

JEROME GRANT II  
PATENT EXAMINER

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.


2. Claims 1-19, are rejected under 35 U.S.C. 102(e) as being anticipated by Shojo et al. (USP 5724641).

With respect to claim 1, Shojo et al., discloses an image forming apparatus (as shown in fig 1) carrying an optical reading apparatus (reading system 10 of fig 1) thereon, wherein said optical reading apparatus (10 of fig 1) comprising: platen glass (16 of fig 1) defined with one end and the other end, on an upper surface of which an original document is placed an optical reading unit (10 of fig 1) that translates between said both ends on a lower surface of said platen glass, (16 of fig 1) for obtaining image data by irradiating an original document surface with light through said platen glass 16 of fig 1); a control circuit board (400 of fig 3, see col.7, lines 33-35), connected to said optical reading unit (system 10 of fig 1), for processing an electric signal and a housing (main body 1 of fig 1) wherein a side on the side of said other end is thicker than a side on the side of said one end, (the upper side of the housing of fig 1, is thicker than the lower end,

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as shown in fig 1), and wherein said image forming apparatus (70 of fig 1) having a cabinet containing: sheet discharge means (200 of fig 1) for discharging an image formation sheet from a lower-part lower-side on said thicker side of said housing of said optical reading apparatus (10 of fig 1) toward a lower-part upper side on said thinner side of said housing and a discharge tray (201 , 203 fig 1) on which the image formation sheet discharged from said sheet discharge means (200 of fig 1) is received and stacked.

With respect to claim 2, Shoji et al, discloses the image forming apparatus (1 of fig 1), wherein said control circuit board (40 of fig 1) is provided in a position lower than running movement space of said optical reading unit (10 of fig 1).

 *Shoji et al*  
With respect to claim 3, an image forming apparatus (1 of fig 1), carrying an optical reading apparatus (10 of fig 1) thereon, wherein said optical reading apparatus (shown in fig 1) comprising: platen glass (116 of fig 1) defined with one end and the other end, on an upper surface of which an original document (original on top of platen glass) is placed light source means (exposure lamp 12 of fig 1) translating between said both ends on a lower surface of said platen glass, (platen glass 16 of fig 1) for irradiating an original document surface with light through said platen glass, see (col.5, lines 40) photoelectric conversion means (line sensor composed of CCD 15 of fig 1) for receiving reflection light from said original document (document on top of platen 16 of fig 1), and converting it into an electric signal a optical path

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means, see (col.5, lines 45-50) for guiding said reflection light to said photoelectric conversion means (line sensor 15 of fig 1) a control circuit board (control circuit 400 of fig 3, see col.7, lines 28-30) connected to said photoelectric conversion means (line sensor 15 of fig 1), for processing an electric signal, see (col.5, lines 45-50) and a housing (housing 1 of fig 1), wherein a side on the side of said other end is thicker than a side on the side of said one end, (the half upper end side of copy machine shown in fig 1, is thicker than the lower half end) and wherein said image forming apparatus (image forming 1 of fig 1), having a cabinet (200 of fig 1), containing: sheet discharge means (sorter a discharge means which is composed of discharge tray 201, see col.7, lines 1-5) for discharging an image formation sheet from a lower-part lower-side on said thicker side of said housing (housing 1 of fig 1) of said optical reading (10 of fig 1) apparatus toward a lower-part upper side on said thinner side of said housing (1 of fig 1) and a discharge tray (201 of fig 1) on which the image formation sheet discharged from said sheet discharge means (107 of fig 1, discharge the document that the image is formed) is received and stacked.

With respect to claim 4, Shojo et al. discloses the image forming apparatus (I of fig 1), wherein said light source means (exposure lam 12 of fig 1) has a first carriage (11a of fig 1) for running said light source means (12 of fig 1) and a second carriage (11b of fig 1) that runs at a speed half of that of said first carriage, see (col.5, lines 45-50).

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With respect to claim 5, Shojo et al, discloses the image forming apparatus (1 of fig 1), wherein said control circuit board (400 of fig 3) is provided at an equal height of or at a position lower than said photoelectric conversion means (line sensor 15 of fig 1).

With respect to claim 6, Shojo et al., discloses the image forming apparatus (1 of fig 1), wherein said optical reading apparatus (10 of fig 1) further comprising shield means (housing of fig 1) surrounding said photoelectric conversion means (line sensor 15 of fig 1) and said control circuit board, (400 of fig 3) for preventing entrance of leakage light inside and outside said apparatus (1 of fig 1) and electric noise and preventing electromagnetic wave interference including diffusion of radiation noise.

With respect to claim 7, Shojo et al., discloses the image forming apparatus (1 of fig 1), wherein in said optical reading apparatus, (10 of fig 1) drive mechanism means (drive means 17 of fig 1) including a drive motor (motor 17 of fig 1) is provided on said other end side rather than said center of said platen glass (16 of fig 1) on a back side opposite to an operation front side of said apparatus.

With respect to claim 8, Shojo et al. discloses the image forming apparatus (1 of fig 1), wherein said platen glass (16 of fig 1) in said housing means (1 of fig 1) of said optical reading (10 of fig 1) apparatus is moved to the operation front side of said apparatus (1 of fig 1).

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With respect to claim 9, Shojo et al, discloses the image forming apparatus (as shown in 1 of fig 1), wherein said image forming apparatus (1 of fig 1) has an automatic document feeding device (ADF 100 of fig 1) on said optical reading apparatus, (10 of fig 1) and wherein said automatic document feeding device (100 of fig 1) is hinged, so as to open and close said platen glass (16 of fig 1) surface, on a back peripheral side opposite to the operation front side of said optical reading (10 of fig 1) apparatus with respect to said cabinet (200 of fig ).

With respect to claim 10, Shojo discloses the image forming apparatus (1 of fig 1) wherein image data of said original document (original positioned on platen 16 of fig 1) is read from said one end side toward said other end (as shown by arrow in fig 1) side of said platen glass (16 of fig 1).

With respect to claim 11, Shojo discloses an optical reading apparatus (10 of fig 1) mounted on an image forming apparatus, (1 of fig 1) comprising: platen glass (16 of fig 1) defined with one end and the other end, on an upper surface of which an original document is placed an optical reading unit (10 of fig 1) that translates between said both ends on a lower surface of said platen glass, (optical reading 10 of fig 1) for obtaining image data by irradiating an original document surface with light through said platen glass (16 of fig 1) a control circuit board ((400 of fig 3, see col.7, lines 33-35) connected to said optical reading unit (10 of fig 1)

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and provided on said other end side rather than said center under a surface of said platen glass, (16 of fig 1) for processing an electric signal.

With respect to claim 12, Shojo et al., discloses the optical reading apparatus (10 of fig 1) wherein said control circuit board (400 of fig 3, see col.7, lines 33-35) is provided in a position lower than running movement space of said moving optical reading unit (10 of fig 1).

With respect to claim 13, Shojo et al. discloses an optical reading apparatus (10 of fig 1) mounted on an image forming apparatus, (1 of fig 1) comprising: platen glass (16 of fig 1) defined with one end and the other end, on an upper surface of which an original document is placed a first carriage means (11a of fig 1) including light source means (12 of fig 1) translating between said both ends on a lower surface of said platen glass, (16 of fig 1) for irradiating an original document surface with light through said platen glass and first reflection means (mirror 13a of fig 1) for reflecting reflection light from said original document surface (original placed on platen 16 of fig 1) in a direction of said one end of said platen glass (16 of fig 1) second carriage means (11b of fig 1) including second reflection means (mirror 13b of fig 1) positioned below said first carriage, (11a of fig 1) synchronously running at a speed half of that of said first carriage (11b of fig 1) between said one end and a center, for reflecting said reflection light from said first reflection means (13a of fig 1) in a direction of said other end of said platen glass photoelectric conversion means, (line sensor 15 of fig 1) provided on said other end side rather

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than said center under a surface of said platen glass (16 of fig 1), for receiving reflection light from said second reflection means (13b of fig 1) and converting it into an electric signal and a control circuit board (400 of fig 3, see col.7, lines 33-35) connected to said photoelectric conversion means (15 of fig 1) and provided on said other end side rather than said center under said platen glass, (16 of fig 1) for processing the electric signal.

With respect to claim 14, Shojo et al., discloses the optical reading apparatus (10 of fig 1), wherein said control circuit board (400 of fig 3, see col.7, lines 33-35) is provided at an equal height of or at a position lower than an image sensor constructing said photoelectric conversion means (line sensor 15 of fig 1).

With respect to claim 15, Shojo et al., discloses the optical reading apparatus (10 of fig 1) wherein said optical reading apparatus further comprising shield means, (cover member the cover housing 1 of fig 1) surrounding said photoelectric conversion means (15 of fig 1) and said control circuit board, (400 of fig 3, see col.7, lines 33-35) for preventing entrance of leakage light inside and outside said apparatus (1 of fig 1) and electric noise and preventing electromagnetic wave interference including diffusion of radiation noise.

With respect to claim 16, Shojo et al., discloses the optical reading apparatus (as shown in of fig 1) further comprising drive mechanism means including a drive motor, (motor 17 of fig



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1) and said drive mechanism means (17 of fig 1) is provided on said other end side rather than said center of said platen glass (16 of fig 1) on a back side opposite to an operation front side of said apparatus (1 of fig 1).

With respect to claim 17, Shojo et al., discloses the optical reading apparatus (as shown in 1 of fig 1), wherein said platen glass (16 of fig 1) in said housing means (1 of fig 1) is moved to the operation front side of said apparatus.

With respect to claim 18, Shojo et al., discloses the optical reading apparatus (10 of fig 1), wherein image data of said original document (original placed platen glass 16 of fig 1) is read from said one end side toward said other end side of said platen glass (16 of fig 1).

With respect to claim 19, Shojo discloses the optical reading apparatus (10 of fig 1) wherein said housing means (1 of fig 1) is formed such that a lower part on the side of said one end is thinner than a lower part on the side of said other end (lower part of 1 of fig 1, is thinner than the upper part).

2. Any inquiry concerning this communication or earlier communication from Examiner should be directed to *Negussie Worku* whose telephone number is (703) 305 5441.

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The Examiner can normally be reached on M-F, 9 am - 6 pm if attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, *Kimberly Williams*, can be reached on (703) 305-4863.

The fax phone number for the organization where this application or proceeding is assigned is (703) 306-5406, and any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



08/20/03

